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(54) **Systems and methods for failure prediction, diagnosis and remediation using data acquisition and feedback for a distributed electronic system**

(57) By using monitoring data, feedback data, and pooling of failure data from a plurality of electronic devices, real-time failure prediction and diagnoses of electronic systems operating in a network environment can be achieved. First, the diagnostic system requests (S110, S120) data on the state of a machine and/or its components and collections thereof as part of the machine's normal operation. Secondly, real-time processing (S160) of the data either at the machine site or elsewhere in the distributed network allows for predicting or diagnosing system failures. Having determined and/or predicted a system failure, a communication to one or more remote observers in the network allows the remote observers to view the diagnostic information and/or required action to repair the failure. Furthermore, interrogation of either the particular electronic system, or a database containing data on similar electronic systems by the diagnostic server allows the diagnostic server to refine original diagnoses based on this population data to achieve a comprehensive failure prediction/diagnosing system.

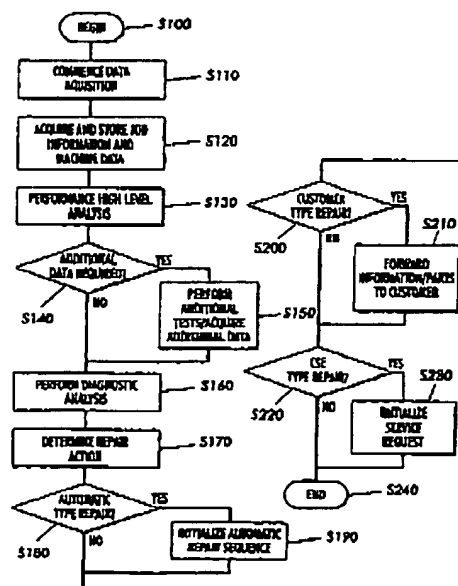


FIG. 4

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EUROPEAN SEARCH REPORT

Application Number
EP 00 31 1190

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Place of search THE HAGUE		Date of completion of the search 11 June 2002	Examiner Herremann, 6
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		Y: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons A: member of the same patent family, corresponding document	

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